

Amendment to the Specification

Please replace the Sequence Listing, pages 35 to 135, with new Sequence Listing pages 35-135 attached as Exhibit A.

At page 7, after line 13 insert the following paragraph:

--BRIEF DESCRIPTION OF THE DRAWING

Fig. 1A-1C presents an alignment of the amino acid sequences of the deduced extracellular subdomains of PC42 (EC-1 through EC-7) (amino acids 42-818 of SEQ ID NO: 95), PC43 (EC-1 through EC-6) (amino acids 29-688 of SEQ ID NO: 97), mouse N-cadherin (EC-1 through EC-5) (amino acids 1-556 of SEQ ID NO: 98) and *Drosophila fat* EC-18 (SEQ ID NO: 99). A sequence on a line in Fig. 1A continues on the same line in Fig. 1B and 1C.

Please replace the paragraph beginning at page 10, line 9, as follows:

The deduced amino acid sequences of the cDNA clones are homologous to, but distinct from the known cadherins. The cadherins described thus far have highly conserved, short amino acid sequences in the third extracellular subdomain (EC-3) including the consensus sequence D-Y-E or D-F-E located at the middle region of the subdomain and the consensus sequence D-X-N-E-X-P-X-F (SEQ ID NO: 41) or D-X-D-E-X-P-X-F (SEQ ID NO: 42) at its end (Hatta et al., *supra*), while the corresponding sequences of other subdomains, except for the fifth extracellular subdomain (EC-5), are D-R-E and D-X-N-D-N-X-P-X-F (SEQ ID NO: 43), respectively. In contrast, the deduced amino acid sequences of the new clones that correspond to cadherin extracellular subdomains include the sequence D-Y-E or D-F-E at one end, but have the sequence D-X-N-D-N-X-P-X-F (SEQ ID NO: 43) instead of D-X-N-E-X-P-X-F (SEQ ID NO: 41) or D-X-D-E-X-P-X-F (SEQ ID NO: 42), at the other end. The polypeptides encoded by the partial clones are homologous to previously identified cadherins but did not show significant homology to any other sequences in Genbank. Therefore, the partial cDNAs appear to comprise a new subclass of cadherin-related molecules

Please replace the paragraph beginning at page 15, line 15, as follows:

FIGURE 1A-C presents an alignment of the deduced amino acid sequences of the extracellular subdomains of pc42 (EC-1 through EC-7, amino acids 42-818 of SEQ ID NO: 95), pc43 (EC-1 through EC-6, amino acids 29-688 of SEQ ID NO: 97), mouse N-cadherin (EC-1 through EC-5, amino acids 1-556 of SEQ ID NO: 98) and *Drosophila fat* EC-18 (SEQ ID NO: 99). A sequence on a line in FIGURE 1A continues on the same line in FIGURES 1B and 1C. Gaps were introduced to maximize homology. In FIGURE 1A-1C, the position at which an amino acid appears in a SEQ ID NO is indicated in parenthesis. For example, in FIGURE 1A the first amino acid of EC1 of protocadherin-43 is an alanine which appears at position 29 in SEQ ID NO: 97 and the last amino acid of the protocadherin-43 EC1 appearing in FIGURE 1A is an alanine which appears at position 63 in SEQ ID NO: 97. The amino acid residues described by capital letters in the "motif" line are present in more than half of the subdomains of N-cadherin, pc42, pc43 and *Drosophila fat*. The amino acid residues described by small letters in the motif line are less well conserved in human pc42, pc43, and *Drosophila fat*. FIGURE 1A-C shows that many amino acids characteristic of other cadherin extracellular domain repeats are conserved in the pc42 and pc43 sequences, including the cadherin sequence motifs DXD, DRE and DXNDNXPXF (SEQ ID NO: 43), two glycine residues, and one glutamic acid residue. Additionally, pc42 and pc43 share unique features in comparison to N-cadherin. More amino acids at specific sites are conserved between pc42 and pc43, such as the DXDXGXN (SEQ ID NO: 100) protocadherin sequence motif near the amino terminus of the pc42 and pc43 subdomains and the AXDXGXP (SEQ ID NO: 101) sequence motif near the carboxyl terminus of the subdomains. Additionally, both protocadherins share regions that do not show significant homology with the typical cadherin motif (of N-cadherin) near the carboxyl terminus of EC-1, in the middle of EC-2 and EC-4, and at the carboxyl terminus of the last repeat. A cysteine residue is located at a similar position in the middle of EC-4 of pc42 and pc43. In general, the extracellular subdomains of pc42 and pc43 are more similar to EC-18 of *fat* than the extracellular subdomains of N-cadherin.

Amendment to the Drawings

Please replace the original drawings, Figure 1A-C, with substitute drawings Figure 1A-C, attached as Exhibit C.